

REMARKS

Claims 17-34 are pending. By this Amendment, claims 1-16 are canceled and claims 23, 25, 28 and 29- 34 are amended.

Applicants gratefully acknowledge that the Office Action indicates that claims 17-22 are allowed and claim 25 includes allowable subject matter.

Reconsideration of the rejections presented in the Office Action based on the following remarks is respectfully requested.

I. The Claims Define Patentable Subject Matter

The Office Action rejects claims 23, 24 and 27-31 under 35 U.S.C. § 102(a) over Kiang (*Carbon Rings and Cages in the Growth of Single Walled Carbon Nanotubes*); and claim 26 under 35 U.S.C. § 103(a) over Kiang. These rejections are respectfully traversed.

Claims 23, 29, 30 and 31 are amended to include the allowable subject matter of claim 25. Thus, claims 23, 29, 30 and 31 are now in condition for allowance.

Regarding claim 28, Kiang does not disclose or suggest a nanotube crystal comprising a bundle of straight-walled carbon nanotubes with approximately identical orientation and diameter. Further, Kiang does not disclose or suggest the display of claim 32, the electrical circuit of claim 33, or the switching element of claim 34 each including at least one nanotube crystal, said at least one nanotube crystal in turn comprising a bundle of straight single-walled carbon nanotubes with approximately identical orientation and diameter.

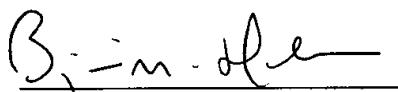
Kiang discloses bundling of straight-walled nanotubes resulting in a hexagonally packed crystal. See page 4763, column 2, second paragraph of Kiang. Further, Kiang

suggests controlling the diameter of nanotubes by controlling the size of carbon rings from which they grow. See Fig. 2 of Kiang. Specifically, Fig. 2(a) of Kiang shows how diameters of straight-walled nanotubes correlate with the percentage of ring isomers. However, Kiang does not at all disclose a bundle of straight-walled carbon nanotubes with approximately identical orientation and diameter. As discussed in the specification at, for example, page 11, lines 17-20, methods according to exemplary embodiments of the invention result in a bundle of nanotubes having equal diameters with no evidence of inhomogeneity or defect.

For at least these reasons, it is respectfully submitted that claims 23 and 28-34 are patentable over Kiang. Claims 24-27, which depend on claim 23, are also patentable over Kiang for at least the reasons discussed as well as for the additional features they recite. Applicants respectfully request that the rejections under 35 U.S.C. § 103 be withdrawn.

Respectfully submitted,

Date: 1/16/04


Benjamin M. Halpern
Reg. No. 46,494
Attorney for Applicants

Mailing Address:
F. Chau & Associates, LLC
1900 Hempstead Turnpike, Suite 501
East Meadow, NY 11554 U.S.A.
(516) 357-0091
(516) 357-0092 (FAX)